

PATENT COOPERATION TREATY

From the
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

PCT

To:

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NOTIFICATION OF TRANSMITTAL OF
THE INTERNATIONAL PRELIMINARY
EXAMINATION REPORT

(PCT Rule 71.1)

MAY 14 2004

Date of mailing
(day/month/year)

10.05.2004

Applicant's or agent's file reference
BA9299PCT

**TO BE REVIEWED
BY ATTORNEY**

IMPORTANT NOTIFICATION

International application No.
PCT/US 03/08179

International filing date (day/month/year)
18.03.2003

Priority date (day/month/year)
19.03.2002

Applicant

E.I. DU PONT DE NEMOURS AND COMPANY et Al.

1. The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary examination report and its annexes, if any, established on the international application.
2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.
3. Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translation to those Offices.

4. REMINDER

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices) (Article 39(1)) (see also the reminder sent by the International Bureau with Form PCT/IB/301).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary examination report. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the PCT Applicant's Guide.

The applicant's attention is drawn to Article 33(5), which provides that the criteria of novelty, inventive step and industrial applicability described in Article 33(2) to (4) merely serve the purposes of international preliminary examination and that "any Contracting State may apply additional or different criteria for the purposes of deciding whether, in that State, the claimed inventions is patentable or not" (see also Article 27(5)). Such additional criteria may relate, for example, to exemptions from patentability, requirements for enabling disclosure, clarity and support for the claims.

EEL NOTED

19 Sept 2004

Name and mailing address of the international preliminary examining authority:



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PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

| | | |
|---|--|---|
| Applicant's or agent's file reference BA9299PCT | FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/PEA/416) | |
| International application No. PCT/US 03/08179 | International filing date (<i>day/month/year</i>) 18.03.2003 | Priority date (<i>day/month/year</i>) 19.03.2002 |
| International Patent Classification (IPC) or both national classification and IPC C07D213/82 | | |
| Applicant E.I. DU PONT DE NEMOURS AND COMPANY et Al. | | |
| <p>1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 5 sheets, including this cover sheet.</p> <p><input type="checkbox"/> This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).</p> <p>These annexes consist of a total of sheets.</p> | | |
| <p>3. This report contains indications relating to the following items:</p> <p>I <input checked="" type="checkbox"/> Basis of the opinion</p> <p>II <input type="checkbox"/> Priority</p> <p>III <input type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p>IV <input type="checkbox"/> Lack of unity of invention</p> <p>V <input checked="" type="checkbox"/> Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p>VI <input type="checkbox"/> Certain documents cited</p> <p>VII <input type="checkbox"/> Certain defects in the international application</p> <p>VIII <input type="checkbox"/> Certain observations on the international application</p> | | |
| Date of submission of the demand 16.10.2003 | Date of completion of this report 10.05.2004 | |
| Name and mailing address of the international preliminary examining authority:  European Patent Office - Gitschiner Str. 103 D-10958 Berlin Tel. +49 30 25901 - 0 Fax: +49 30 25901 - 840 | Authorized Officer Hass, C Telephone No. +49 30 25901-340  | |

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. PCT/US 03/08179

I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

Description, Pages

1-49 as originally filed

Claims, Numbers

1-15 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
☐ the language of publication of the international application (under Rule 48.3(b)).
☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority in written form.
☐ furnished subsequently to this Authority in computer readable form.
☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
☐ the claims, Nos.:
☐ the drawings, sheets:

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. PCT/US 03/08179

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability;
citations and explanations supporting such statement**

1. Statement

| | | |
|-------------------------------|-------------|------|
| Novelty (N) | Yes: Claims | 1-15 |
| | No: Claims | |
| Inventive step (IS) | Yes: Claims | |
| | No: Claims | 1-15 |
| Industrial applicability (IA) | Yes: Claims | 1-15 |
| | No: Claims | |

2. Citations and explanations

see separate sheet

Re Item V

Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Cited documents

D1: WO 01 11966 A (AVENTIS CROPS SCIENCE GMBH; EKWURU TENNYSON (FR); PETTINGER ANDREW) 22 February 2001 (2001-02-22) cited in the application

D2: WO 99 42447 A (MOLONEY BRIAN ANTHONY; SAVILLE STONES ELIZABETH ANNE (GB); AGREVO) 26 August 1999 (1999-08-26)

2. Novelty

The composition of claim 1 and the compounds of claim 15 are different from D1 in that the pyridine ring on the "left-hand side" of the molecule, in the present compounds, cannot be substituted by haloalkyl, however, in the D1 compounds, there is always a haloalkyl substituent at that ring.

The composition of claim 1 and the compounds of claim 15 are different from D2 in that the ring on the "right-hand side" of the molecule is pyridine in the present case, but phenyl in the D2 compounds.

The subject-matter of the claims on file (claims 1-15) is thus novel with regard to D1 and D2.

3. Inventive step

3.1 According to the description, the problem underlying the present application is to provide pyridinyl amides which are useful as fungicides in mixtures with other fungicides.

3.2 D1 is considered to represent the closest prior art for the subject-matter of the claims on file. D2 is considered relevant as well. The D1 compounds always bear a haloalkyl group at the pyridine ring on the "left-hand side" of the molecule. For the corresponding ring of the compounds of the application, such substituents are not included, however, haloalkenyl and halocycloalkyl are possible. In the D2 compounds, the ring on the "right-hand side" of the molecule is phenyl; the corresponding ring in the

present compounds is pyridinyl, which can be obtained from phenyl by a "classical" isosteric replacement of the C atom by an N atom. Such replacement will be taken into consideration by a skilled person especially in view of D1 where the ring in question is actually pyridinyl. In D2, concrete compounds are disclosed which are different from the present compounds only in that they bear a phenyl instead of a pyridinyl, but wherein the substitution pattern is exactly in accordance with the definition given in present claim 1, see D2, table 1, compounds 60, 62, 195-199, 202-216. Moreover, in both D1 and D2 the skilled person finds a statement that the compositions containing these compounds can comprise one or more additional active ingredients, e.g. compounds which are known to possess fungicidal properties (see D1, page 5, lines 13-15; D2, page 5, lines 7-9. Therefore, the listing of other fungicides to be used in the composition of present claim 1 as well as special weight ratios does not appear to be based on an inventive step. It follows from the above arguments that the subject-matter of claims 1-11 cannot be considered inventive.

The subject-matter of claims 12-14 cannot be considered inventive either because of the disclosures of D1, page 4, lines 26-31 and page 33 line 18 to page 34, line 8; as well as D2, page 4, line 21-27 and page 32, lines 1-26.

3.3 As to the subject-matter of claim 15, it is noted that this claim is an absolute compound claim, comprising compounds which are different from the compounds being part of the composition of claim 1 due to the fact that they have an iodo substituent at the pyridine ring on the "left-hand side" of the molecule. In view of the compounds of claim 1 (being part of a composition) it will appear that the iodo substituent is an arbitrary feature since it was not made credible that this feature causes a technical effect. At the moment it seems that the feature "iodo substituent" is foreshadowed in D1 by the list of possible substituents at the ring A1, see D1, page 2, lines 7 to 15, which list includes halogen. Consequently, inventive step is to be denied for the subject-matter of claim 15, too.

4. Industrial applicability

The subject-matter of claims 1-15 is industrially applicable.